Chih-Yu Lin

Personal Information

- *Name:* **Chih-Yu Lin**
- *Birthplace:* **Hualien, Taiwan**
- *E-mail:* **lincyu (at) mail (dot) ntou (dot) edu (dot) tw**

Education

- *PHD, National Chiao Tung University (Taiwan), Department of Computer Science (Sep. 2003 ~ Sep. 2007)*
  Dissertation: [Communication Protocols for Location Management in Object Tracking Sensor Networks](#)
  Advisor: Prof. Yu–Chee Tseng and Prof. Wen–Chih Peng

- *Visiting Student, Ohio State University (USA), Department of Computer Science and Engineering (Sep. 2006 ~ Dec. 2006)*

- *MS, National Central University (Taiwan), Department of Computer Science and Information Engineering (Sep. 1998 ~ June 2000)*
  Thesis: [A Multi–Channel MAC Protocol with On–Demand Channel Assignment for Mobile Ad Hoc Networks](#)
  Advisor: Prof. Jang–Ping Sheu and Prof. Yu–Chee Tseng

- *BS, National Central University (Taiwan), Department of Computer Science and Information Engineering (Sep. 1993 ~ June 1998)*
  Project: A Proxy Server for Wireless Networks
  Advisor: Prof. Jang–Ping Sheu and Prof. Yu–Chee Tseng

Interview

- INSIDE: [幫女友排班到百萬下載《班表小幫手》開發者如何打造細水長流型 App](#)

Experiences (Partial)

- 2020/02 ~ present Assistant Professor at Dept. of Computer Science and Engineering, National Taiwan Ocean University

- 2008/02 ~ 2011/07 Assistant Professor at Dept. of Applied Informatics and Multimedia, Asia University
- 2018/09 ~ 2019/01 國立交通大學資訊工程學系『Android程式設計 (使用 Kotlin)』
- 2017/02 ~ 2017/06 台北市立大學資訊科學系『Swift程式語言與iOS專案設計』
- 2016/05 交通大學電子系人才培訓中心『行動裝置應用開發』講師
- 2015/10 ~ 2015/10 扎根高中資訊教育課程講師
- 2015/06 ~ 2015/06 『Android應用程式開發實務』講師 (凌陽科技)
- 2015/05 ~ 2015/05 『App 開發入門』講師 (精英電腦)
- 2015/03 ~ 2015/10 茂為歐買尬數位科技技術顧問
- 2014/07 ~ 2015/02 有無科技技術長
- 2014/05 ~ 2014/05 國立交通大學資訊軟體技術人才培訓講師 (課程名稱：開發 Android行動裝置(手機、面板)應用軟體之策略與實作)
- 2014/02 ~ 2014/06 國立交通大學資訊工程學系兼任助理教授 (課程名稱：雲端行動感測應用)
- 2013/03 ~ 2013/05 銘傳大學 Android 手機應用程式設計訓練班講師
- 2013/02 ~ 2014/06 國立交通大學資訊工程學系兼任助理教授 (課程名稱：雲端行動感測應用)
- 2012/09 ~ 2012/10 國立交通大學資訊軟體技術人才培訓講師 (課程名稱：開發 Android行動裝置(手機、面板)應用軟體之策略與實作)
- 2012/09 ~ 2012/11 台北市立教育大學資訊科學系兼任助理教授 (課程名稱：高等程式設計)
- 2012/02 ~ 2012/06 台北市立教育大學資訊科學系兼任助理教授 (課程名稱：Java Programming (II))
- 2012/02 ~ 2012/06 國立交通大學資訊工程學系兼任助理教授 (課程名稱：手機應用軟體開發與創意專題)
- 2011/09 ~ 2011/10 國立交通大學資訊軟體技術人才培訓講師 (課程名稱：Android 手機應用軟體開發與實作)
- 2009/07 ~ 2009/09 Visiting Scholar at Institute of Information Science, Academia Sinica
- 2010/06 ~ 2010/07 國立交通大學資訊軟體技術人才培訓講師 (課程名稱：手機應用軟體開發與實作)
- 2010/02 ~ 2010/06 國立交通大學資訊工程學系兼任助理教授 (課程名稱：Android Programming)
- 2007/09 ~ 2008/01 Part-time Engineer at Realtek-NCTU Joint Research Center
- 2006/09 ~ 2006/12 Visiting Student, Ohio State University

Biography

Chih-Yu Lin received his B.S. and M.S. degrees in Computer Science from the National Central University in 1998 and 2000, respectively. He obtained his Ph.D. in Computer Science from the National Chiao-Tung University in September 2007. His research interests include mobile digital content, wireless networks, distributed computing, and artificial intelligence.

Publication List

Journal

1. S.–L. Wu, Y.–C. Tseng, **C.–Y. Lin**, and J.–P. Sheu, "A Multi–Channel MAC Protocol with Power Control for Multi–Hop Mobile Ad Hoc Networks," The Computer Journal, Vol. 45, No. 1, 2002, pp. 101–110. (SCIE, EI)
2. S.–L. Wu, **C.–Y. Lin**, Y.–C. Tseng, and J.–P. Sheu, "A Novel MAC Protocol with On–Demand Channel Assignment for Multi–Hop Mobile Ad–Hoc Networks," Int'l J. of Electrical Engineering, Vol. 11, No. 4, Nov. 2004, pp. 361–374. (EI)
3. **C.–Y. Lin**, W.–C. Peng, and Y.–C. Tseng, "Efficient In–Network Moving Object Tracking in Wireless Sensor Networks," IEEE Trans. on Mobile Computing, Vol. 5, No. 8, Aug. 2006, pp. 1044–1056. (SCI)
4. **C.–Y. Lin**, Y.–C. Tseng, Ten–Hwang Lai, W.–C. Peng and H.–W. Fang, "Message–efficient In–network Location Management in a Multi–sink Wireless Sensor Network," Int'l Journal of Sensor Networks, Vol. 3, No. 1, 2008, pp. 3–15.
5. **C.–Y. Lin**, Y.–C. Tseng, and Yung–Chih Liu, "Imprecision–tolerant Location Management for Object–tracking Wireless Sensor Networks," The Computer Journal, Vol. 53, No. 3, 2010, pp. 351–364. (SCIE, EI)
6. W.–C. Shih, S.–S. Tseng, C.–C. Yang, **C.–Y. Lin** and T. Liang (in press), "A Folksonomy–based Guidance Mechanism for Context–aware Ubiquitous Learning: a Case Study of Chinese Scenic Poetry Appreciation Activities," Educational Technology & Society, Vol. 15, No. 1, 2012, pp. 90–101. (SSCI)
7. **C.–Y. Lin**, Y.–C. Tseng, and Ten–Hwang Lai, "Exploiting Spatial Correlation at the Link Layer for Event–driven Sensor Networks," Int'l Journal of Sensor Networks, Vol. 12, No. 1, July 2012, 1–15.
8. **C.–Y. Lin**, C.–H. Wang, and Y.–C. Tseng, "A TDMA Protocol with Reinforcement Learning Slot Selection for MANETs," International Journal of Ad Hoc and Ubiquitous Computing, 2021 Vol.37 No.1, pp.16 – 25. [Website]
9. W.–C. Liang, C.–M. Chao, **C.–Y. Lin**, and C.–C. Yeh, "Transmission Range Determination and Antenna Deployment to Recognize Fitness Actions Using Wi–Fi Signals," International Journal of Ad Hoc and Ubiquitous Computing, Vol. 41, Issue 4, Oct. 2022 (SCI)
10. K.–W.i Chen, C.–M. Chao, **C.–Y. Lin**, and C.–C. Yeh, "Anti–Jamming Channel Hopping Protocol Design Based on Channel Occupancy Probability for Cognitive Radio Networks," Computer Networks, Vol. 214, Sep. 2022. (SCI)
11. Y. –J. Yang, C. –M. Chao, C. –C. Yeh and **C. –Y. Lin**, "WFID: Driver Identity Recognition Based on Wi–Fi Signals," in IEEE Transactions on Vehicular Technology, vol. 72, no. 1, pp. 679–688, Jan. 2023, doi: 10.1109/TVT.2022.3203725. (SCI)
12. Y.–Heng Hsieh, C.–M. Chao, C.–C. Yeh, and **C.–Y. Lin**, "Anti–Jamming Low–Latency Channel Hopping Protocol for Cognitive Radio Networks," Electronics, 12(8):1811, 2023, https://doi.org/10.3390/electronics12081811 (SCI)

Conference

1. S.–L. Wu, **C.–Y. Lin**, Y.–C. Tseng, and J.–P. Sheu, "A New Multi–Channel MAC Protocol with On–Demand Channel Assignment for Mobile Ad Hoc Networks," Int'l Symp. on Parallel Architectures, Algorithms and Networks (I–SPAN), Dallas, Texas, USA, Dec. 2000, pp. 232–237.

2. Y.–C. Tseng, S.–L. Wu, **C.–Y. Lin,** and J.–P. Sheu, "A Multi–Channel MAC Protocol with Power Control for Multi–Hop Mobile Ad Hoc Networks," Int'l Workshop on Wireless Networks and Mobile Computing, 2001 (in conjunction with ICDCS2001), Phoenix, Arizona, USA, April 2001, pp. 419–424.

3. **C.–Y. Lin** and Y.–C. Tseng, "Structures for In–Network Moving Object Tracking in Wireless Sensor Networks," Broadband Wireless Networking Symp.(BroadNet), San Jose, California, USA, Oct. 2004.

4. **C.–Y. Lin**, Y.–C. Tseng, and T.–H. Lai, "Message–Efficient In–Network Location Management in a Multi–sink Wireless Sensor Network," IEEE Int'l Conf. on Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC), Taichung, Taiwan, June 2006.

5. **C.–Y. Lin**, Y.–C. Tseng, H.–W. Fang, Y.–F. Kao, Y.–F. Lee, and C.–C. Shen, "Vague Location Tracking in Wireless Sensor Networks," Asia–Pacific Wireless Communications Symp. (APWCS), Sendai, Japan, Aug. 2008.

6. **C.–Y. Lin**, "A Quadtree–based Location Management Scheme for Wireless Sensor Networks," IEEE/IFIP Network Operations and Management Symposium, Osaka, Japan, April 2010.

7. **林致宇**、時文中, "位置感知旅遊翻譯機之設計與實作," 第六屆台灣數位學習發展研討會，台灣，台中，2010年10月.

8. **C.–Y. Lin**, S.–H. Lu, Y.–C.Tseng, "A Channel Management Protocol for Multi–Channel, Single–Radio 802.11–based Wireless Mesh Networks," IEEE International Workshop on Computer Aided Modeling Analysis and Design of Communication Links and Networks, Kyoto, Japan, June 2011.

9. C.–C. Wu, L.–P. Tung, **C.–Y. Lin**, B.–S. Lin, and Y.–C. Tseng, "On Local Cache Management Strategies for Mobile Augmented Reality", in Proc. of IEEE International Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM), Sydney, Australia, June 2014.

10. 譚宇均、林元偉、**林致宇**、陳志成, "適地性社群媒體的設計與實作," 第二十一屆行動計算研討會，台灣，南投，2016年8月.

11. Y.–H. Lin, J.–C. Chen, **C.–Y. Lin**, B.–Y. Su, P.–Y. Lee, "Poster: SensingGO: toward mobile/cellular data measurement with social and rewarding activities," in Proc. of ACM International Conference on Mobile Computing and Networking (MobiCom '18), New Delhi, India, pp. 765 – 767, Oct. 2018.

12. T.–K. Lee, Y.–C. Kuo, S.–H. Huang, G.–S. Wang, **C.–Y. Lin**, and Y.–C. Tseng, "Augmenting Car Surrounding Information by Inter–Vehicle Data Fusion," in Proc. of IEEE Wireless Communications and Networking Conference (WCNC), Marrakech, Morocco, April 2019.

13. Y.–H. Lin, J.–C. Chen, **C.–Y. Lin**, B.–Y. Su, and P.–Y. Lee, "Transportation Type Identification by using Machine Learning Algorithms with Cellular Information," in Proc. of IEEE International Conference on Communications (ICC '19), Shanghai, China, May 2019.

14. T.–K. Lee, T.–W. Wang, W.–X. Wu, Y.–C. Kuo, S.–H. Huang, G.–S. Wang, **C.–Y. Lin**, J.–J. Chen, and Y.–C. Tseng, "Building a V2X Simulation Framework for Future Autonomous Driving," The 20th Asia–Pacific Network Operations and Management Symposium (APNOMS), Matsue, Japan, Sep. 2019.

15. 林獻庭、何鳳雯、林家弘、李佩俞、林逸豪、**林致宇**、陳志成, "SensingGO: 結合社交與獎勵活動之群眾量測平台," 第十五屆無線、隨意及感測網路研討會，台灣，台南，

2019年8月.

16. 李佩俞、林獻庭、何鳳雯、林家弘、林逸豪、**林致宇**、陳志成, "使用長短期記憶神經網路演算法結合蜂巢式網路資訊的移動類型辨識器," 臺灣網際網路研討會，台灣，高雄，2019年9月.

17. Albert Budi Christian, **C.–Y. Lin**, C.–W. Lee, L.–D. Van, and Y.–C. Tseng, "A Neural Network–based Multisensor Data Fusion Approach for Enabling Situational Awareness of Vehicles," International Conference on Pervasive Artificial Intelligence (ICPAI), Taipei, Taiwan, Dec. 2020.

18. Albert Budi Christian, **Chih–Yu Lin**, Lan–Da Van, and Yu–Chee Tseng, "Data Fusion Driven Lane–level Precision Data Transmission for V2X Road Applications," International Symposium on Embedded Multicore/Many–core Systems–on–Chip (MCSoC), Singapore, Dec. 2021.

19. **林致宇**、黃弘毅, "軟體定義網路下基於流量類別概念的流量分類與排程方法," 臺灣網際網路研討會，台灣，台中，2021年12月.

20. Albert Budi Christian, Yu–Hsuan Wu, **Chih–Yu Lin**, Lan–Da Van, and Yu–Chee Tseng, "Radar and Camera Fusion for Object Forecasting in Driving Scenarios," International Symposium on Embedded Multicore/Many–core Systems–on–Chip (MCSoC), Malaysia, Dec. 2022.

21. Albert Budi Christian, **Chih–Yu Lin**, Yu–Chee Tseng, Lan–Da Van, Wan–Hsun Hu, and Chia–Hsuan Yu, "Accuracy–Time Efficient Hyperparameter Optimization Using Actor–Critic–based Reinforcement Learning and Early Stopping in OpenAI Gym Environment," International Conference on Internet of Things and Intelligence System (IoTaIS), Bali, Indonesia, Nov. 2022.

22. 梁晉維、**林致宇**, "實現車輛周遭環境感知的自動標記法," 臺灣網際網路研討會，台灣，桃園，2022年12月.

23. 曾千庭、**林致宇**、程匯芳、林暐傑, "使用聯邦式學習進行網路流量分類," 臺灣網際網路研討會，台灣，桃園，2022年12月.

24. Guan–Sheng Wang, **Chih–Yu Lin**, Yu–Chee Tseng, and Lan–Da Van, "A Multilayer Perceptron Model for Station Grouping in IEEE 802.11ah Networks," IEEE/IFIP Network Operations and Management Symposium (NOMS), Miami, USA, May 2023. **(presenter)**

25. 江庭葳、曾千庭、**林致宇**, "使用 Autoencoder 和聯邦式學習進行網路流量分類," 第二十七屆行動計算研討會(MC 2023)，台灣，基隆，2023年8月.

26. Albert Budi Christian, Yi–Qi Zhong, Wan–Hsun Hu, Chia–Hsuan Yu, and **Chih–Yu Lin**, "A Simple Deep Q–Network based Feature Selection Method," In VTS Asia Pacific Wireless Communications Symposium, APWCS 2023, Tainan city, Taiwan, August 23–25, 2023. pages 1–4, IEEE, 2023. **(presenter)**

27. 安立郁、**林致宇**, "資料不平衡對網路流量分類的影響," 第二十八屆行動計算研討會(MC 2024)，台灣，台北，2024年8月.

28. 劉仲恒、**林致宇**, "FedMDFNN模型之改進及效能分析," 無線、隨意及感測網路研討會 (WASN 2024)，台灣，台北，2024年8月.

29. Wei–Rong Chen, **Chih–Yu Lin**, Yu–Chee Tseng, "Label Expansion through Walking Trajectories for Wi–Fi CSI–Based Indoor Localization," IEEE International Symposium on Personal, Indoor and Mobile Radio Communication (PIMRC), Valencia, Spain, Sep. 2024.

Book

1. **林致宇**，"[Android程式設計入門與應用(第二版)](#)"，全華出版 (2015, ISBN: 978-957-21-9833-9)
2. **林致宇**，"[Android程式設計入門與應用](#)"，全華出版 (2014, ISBN: 978-957-21-9412-6)
3. 曾煜棋、林政寬、**林致宇**、潘孟鉉，"無線網路：通訊協定、感測網路、射頻技術與應用服務"，碁峰出版 (2011, ISBN: 9789862763094)
4. 曾煜棋、潘孟鉉、**林致宇**，"無線區域及個人網路–隨意及感測網路之技術與應用"，知城出版 (2007, ISBN: 9868293316)

Book Chapters

1. W.-H. Tam, **C.-Y. Lin**, and Y.-C. Tseng, "Wireless Mesh Networks: Design Principles," Wireless Ad Hoc Networking: Personal-Area, Local-Area, and Sensory-Area Networks, Edited by Shih-Lin Wu and Yu-Chee Tseng, Auerbach Publications, 2007, (ISBN-10: 0849392543, ISBN-13: 978-0849392542)
2. **C.-Y. Lin**, W.-H. Tam, and Y.-C. Tseng, "Wireless Mesh Networks: Multi-Channel Protocols and Standard Activities," Wireless Ad Hoc Networking: Personal-Area, Local-Area, and Sensory-Area Networks, Edited by Shih-Lin Wu and Yu-Chee Tseng, Auerbach Publications, 2007, (ISBN-10: 0849392543, ISBN-13: 978-0849392542)

Technical Reports

1. S.-L. Wu, **C.-Y. Lin**, C.-J. Huang, Y.-C. Tseng, and J.-P. Sheu, "W4: A WWW Proxy Server for Wireless Networks," Cross-Straight Information Technology, 1999, Chung-Li, Taiwan.

Patent

1. 曾煜棋，**林致宇**，林炳榕，"無線網路以及無線基地台頻道的動態配置方法與系統", No. I 258276, Taiwan (2006.7-2024.11, owned by III).
2. Y.-C. Tseng, **C.-Y. Lin**, and B.-R. Lin, "Methods and Systems of Dynamic Channel Allocation for Access Points in Wireless Networks", US Patent, No. 7,376,099, (2008/5/20, owned by III).
3. **林致宇**，劉永之，莊哲熙，曾煜棋，"用於一感測網路之節點裝置、節點數量調整方法及其電腦程式產品", 201031143, Taiwan (2010/08/16, owned by III)
4. **C.-Y. Lin**, Y.-C. Liu, C.-H. Chuang, and Y.-C. Tseng, "Node Apparatus, Node Quantity Adjustment Method, and Tangible Machine-readable Medium for a Sensor Network", US Patent, No. US 2010/0195515 A1 (2010/8/5, owned by III)
5. 林致宇，刘永之，庄哲熙，曾煜棋，"用于一传感器网络的节点装置及节点数量调整方法", China, CN101827460A (2009/3/2, owned by III)
6. 曾煜棋，呂書賢，**林致宇**，"無線網路", 201112810, Taiwan (2011/04/01, owned by Realtek)
7. Y.-C. Tseng, S.-H. Lu, and **C.-Y. Lin**, "Wireless Network", US Patent, No. US 2010/0165923 A1 (2010/7/1, owned by Realtek)
8. 曾煜棋，呂书贤，林致宇，"无线网络", China, CN101772124A (2010/7/7, owned by Realtek)

Academic Activities

Reviewer:

- IEEE Transactions on Vehicular Technology
- IEEE Transactions on Mobile Computing
- IEEE Communications Letters
- IEEE Transactions on Systems, Man and Cybernetics
- The Computer Journal
- Computer Networks
- IET Communications
- Journal of Information Science and Engineering
- Information Processing Letters
- Journal of Communications and Networks
- Journal of Internet Technology
- Sensors
- Ad Hoc Networks
- 《亞東學報》第三十期審查委員
- IEEE Wireless Communication & Networking Conference (WCNC), 2006
- IEEE Wireless Communication & Networking Conference (WCNC), 2007
- The ACM International Symposium on Mobile Ad Hoc Networking and Computing (MobiHoc), 2008
- MCECN Workshop on Mobile Computing and Emerging Communication Networks, 2010
- 第二屆海峽兩岸研討論, 2008
- 全國電信研討會(National Symposium Telecommunications (NST), 2008)
- 全國電信研討會(National Symposium Telecommunications (NST), 2009)
- 全國電信研討會(National Symposium Telecommunications (NST), 2011)
- ICDCS 2013
- 長庚資工畢業專題展評審 (2015)
- 2015年靜宜大學創新創意專題決賽評審 (2015/12/3)

Technical Program Committee Member:

- The Second International Conference on Sensor Technologies and Applications (SENSORCOMM), 2008
- The Third International Conference on Sensor Technologies and Applications (SENSORCOMM), 2009
- The Fourth International Conference on Sensor Technologies and Applications (SENSORCOMM), 2010
- The Second International Workshop on Sensor Networks (SN), 2009
- The Third International Workshop on Sensor Networks (SN), 2010

研討會主持人:

- 第六屆台灣數位學習發展研討會Session I：語言學習共同主持人
- Sensors 2012 (Practice and Evaluation of Sensor Networks Session,Session Chair)

Invited Talks (Partial)

1. Multi–Channel Protocols for Wireless Mesh Networks (2007/12/4, National Chiao Tung University)
2. Medium Access Control (MAC) Protocols for Wireless Sensor Networks (2007/12/6, National Chiao Tung University)
3. The Usage and Applications of PowerPoint (2008/3/26 數位教材製作體驗營)
4. Medium Access Control (MAC) Protocols for Wireless Sensor Networks, 亞洲大學資科系九十六學年度第二學期專題研討
5. Object–Tracking Sensor Networks, 亞洲大學資科系九十七學年度第一學期專題研討
6. Android基本應用程式設計(亞東技術學院『Android平台手機程式設計與實務開發』研習營，2010/7/7)
7. Mobile Devices and Applications in the Cloud Computing World (2010/12/22, Industrial Technology Research Institute of Taiwan, R.O.C)
8. Mobile Device Programming (2010/12/24, Industrial Technology Research Institute of Taiwan, R.O.C)
9. Android 行動裝置之網路應用 (2011/3/24, 大同大學資訊經營學系)
10. 智慧型手機創新應用之我見 (2011/9/1, WASN 2011大會導讀)
11. 智慧型手機創新應用之我見 (2011/10/6, 淡江大學)
12. 雲端行動應用開發經驗分享(2014/6/5, 大同大學)
13. 【行動終端】軟體開發上架與創新創業交流研習會講者 (2014/10/24, 台北科技大學)
14. App 創意發想與推廣 (2014/11/27, 正修科技大學)
15. 行動終端使用者體驗 (2014/11/27, 正修科技大學)
16. Android 進階應用 (資料庫與UI的連結) (2015/06/13, 靜宜大學)
17. Android Wear 應用開發 (2015/07/05, 台大生醫電資營)
18. NFC與IoT應用 (2015/07/06, 台大生醫電資營)
19. 我的資訊人生 (2015/10/27, 國立嘉義大學)
20. 如何寫出高下載量的App (2015/11/3, 國立嘉義大學)
21. 如何寫出高下載量的App (2016/4/12, 逢甲大學)
22. 如何寫出高下載量的App (2016/12/19, 玄奘大學)
23. App開發、經營與行銷 （2020/11/25, 國立臺北商業大學)

Awards

1. 2014 第7屆iT邦幫忙鐵人賽 App 開發組冠軍
2. 2013 黃金企鵝獎最佳效能獎
3. Recipient of the Phi Tau Phi Scholastic Honor, 2000
4. 亞洲大學97學年度教材製作競賽，實體教具組第一名
5. 亞洲大學98學年度教材製作競賽，電腦輔助教學軟體組第二名
6. 亞洲大學99學年度教材製作競賽，電腦輔助教學軟體組第二名
7. 亞洲大學帶領學生赴日本參加日本金澤工業大學工程設計專題發表
8. 指導學生參加2013電信創新應用大賽，獲得行動 App 校園組冠軍
9. 指導學生參加2021中山大學5G實驗場域創新應用競賽，獲得創意組佳作

Certificates

1. 雲端技術資訊管理師證書 (工業技術研究院)

2. 雲端技術資訊管理師職能鑑定合格, 2011
3. 日語檢定JLPT三級, 2008

Projects

1. 計畫名稱：物件追蹤感測網路上能夠容忍不精確位置資訊的位置管理機制。補助機構：行政院國家科學委員會。九十七學年度。(NSC 97 – 2218 – E – 468 – 008 –)
2. 計畫名稱：一個適用於事件驅動無線感測網路並利用了感測資料空間相關性的媒介存取控制協定。補助機構：行政院國家科學委員會。九十八學年度。(NSC 98 – 2221 – E – 468 – 011 –)
3. 計畫名稱：無線感測網路上一個以四分樹為基礎的位置管理系統。補助機構：行政院國家科學委員會。九十九學年度。(NSC 99 – 2221 – E – 468 – 004 –)